

disclaimer, and new claims 7 and 8 have been added.

Reconsideration is respectfully requested of the objection to the drawings.

Submitted herewith is a Letter With Proposed Drawing Changes in which Figs. 1 and 2 are to be amended to include the legend "Prior Art". In addition, in view of the new claims submitted hereby it is respectfully submitted that all claimed method steps and apparatus are clearly shown in the drawings and specifically, in Figs. 3 and 4, for example.

Reconsideration is respectfully requested of the objection to the specification.

The specification clearly coincides with the newly substituted claims, as described commencing at page 11, for example.

Reconsideration is respectfully requested of the objection to the title of the application.

A new title has been proposed that is intended to be more clearly indicative of the novel features to which the new claims are directed.

Reconsideration is respectfully requested of the objection to the abstract.

A new abstract has been provided that is intended to briefly describe the claimed features of the invention.

The cancellation of claim 4 renders moot the rejection thereto as containing informalities.

Similarly, the cancellation of claims 4-6 renders moot the rejection thereof under 35 USC 103, as being unpatentable over Friel et al.

The present invention is intended to provide a system for providing a more accurate remainder battery capacity calculation that is typically stored in the memory of a microcomputer used in an intelligent-type battery charging system. In previous systems, when the battery is not used for awhile, it is put into a standby mode and the microcomputer that is not used is set into a sleep mode. Even though the microcomputer is in the sleep mode there occurs some leakage in the overall battery system. Thus, if the microcomputer is in the sleep mode for a long period of time the actual remaining battery capacity is less than the remaining battery capacity value that was previously stored in the memory. In other words, the remaining capacity value that is stored appears to be greater than the actual remaining capacity value due to the current leakage that occurs during the time that the microcomputer is in the sleep mode.

To overcome this problem, the present invention provides a timer that measures the time during which the microcomputer is in the sleep mode and uses that measured time to calculate a correction value that is then used to correct the previously stored remaining capacity value so as to produce an up-to-date

remaining battery capacity value.

The new claims 7 and 8 are intended to set forth the above-noted features of the present invention. In that regard, the apparatus claim 7 follows the features shown in the present application in Fig. 3 and new method claim 8 shows the steps followed in the flowchart of Fig. 4.

Friel et al. discloses a battery operating system that is intended to provide an intelligent rechargeable battery that measures various parameters and adjusts the charging of the battery accordingly. In Friel et al. a smart battery device is described that includes a microprocessor and in which the device can be in the sleep mode. The microprocessor controls the rechargeable battery and calculates predictive data, such as the battery's remaining life.

Nevertheless, Friel et al. does not disclose the use of a timer for measuring a time during which the microprocessor is in the sleep mode, as taught by the present invention and as recited in the amended claims.

Accordingly, by reason of the new claims substituted hereby that clearly reflect the invention shown in the drawings and described in the specification, it is respectfully submitted that the present invention is patentably distinct over the cited reference.

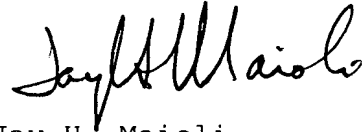
The references cited as of interest have been reviewed and are not seen to show or suggest the present invention as

recited in the amended claims.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

COOPER & DUNHAM LLP

A handwritten signature in black ink, appearing to read "Jay H. Maioli". The signature is written in a cursive, flowing style with a large, prominent "M".

Jay H. Maioli  
Reg. No. 27, 213

JHM:gr